

REMARKS

The outstanding Action dated December 9, 2002 has been received and carefully noted. The above amendments and the following remarks are submitted as a full and complete response thereto.

Applicant thanks the Examiner for the courtesies shown to his representative during the Personal Interview of May 13, 2003. It is submitted that the following remarks and the preceding amendments are an accurate representation of the matters discussed during the Interview.

Claims 28-58 and 60-70 are pending and submitted for reconsideration thereof.

DRAWING OBJECTIONS

A. The drawings are objected to under 37 C.F.R. § 1.83(a).

The Examiner objected to the drawings for allegedly not illustrating (1) the receptacle as being suspended (hereinafter "item 2.1"), (2) the locking mechanism (hereinafter "item 2.2"), and (3) the actions of the chock on the receptacle (hereinafter "item 2.3").

Regarding item 2.1, claim 28 has been amended in order to address the Examiner's concern regarding the suspension of the receptacle. Support thereof can be found, e.g., on page 2, lines 20-21 of the specification which describes the suspension of the receptacle as a mounting of the receptacle on shock absorbers.

Regarding items 2.2 and 2.3, it is submitted that the amendments made to the specification and the claims have sufficiently addressed the Examiner's concerns, and it is requested that these objections be withdrawn.

B. The drawings are again objected to under 37 C.F.R. § 1.83(a).

The Examiner again objected to the drawings for allegedly not showing (1) a spring or return means (hereinafter "item 3.1"), (2) shift M2 and movement M1 (hereinafter "item 3.2"), (3) a mechanical means for the temporary locking of the spring-back shift (hereinafter "item 3.3"), and (4) the cartridge housed in the receptacle (hereinafter "item 3.4").

In response to item 3.1, Applicant has amended Figure 5 to more clearly illustrate the spring or return means (400). It is requested that the objection be withdrawn in light of the amendment.

Regarding item 3.2, Applicant has more clearly delineated the actions of the shift M2 and the movement M1 in the attached proposed amendments to the drawings. Additionally, the specification and claims have been amended to address this issue as well. Therefore, it is requested that the objection be withdrawn in view of the amendments and statements made above.

As to item 3.3, Applicant submits that the above-described chock (90) and cam (75) adequately address this concern and that these elements are clearly labeled in Figure 5. Therefore, it is requested that this objection be withdrawn in view of the above statements and amendments to both the specification and the claims.

Finally, it is submitted that item 3.4 has been addressed in the amendments made to the specification, and it is respectfully requested that the objection be withdrawn.

C. Previously submitted drawing corrections to Figure 5 have been objected to.

The Examiner has objected to the proposed drawing corrections to Figure 5 for allegedly containing inconsistent use of reference numerals and letters. Applicant has attached to this Response a new request for drawing changes to Figure 5. It is respectfully submitted that the Examiner's concern as set forth in item 4 of the outstanding Action has been addressed by the new request and a prompt approval thereof is solicited.

SPECIFICATION OBJECTIONS

A. The disclosure is objected to because of certain informalities.

The Examiner has objected to the description of shift M2 and movement M1 (hereinafter "item 5.1"), the descriptions of movements (1)-(3) (hereinafter "item 5.2"), and the temporary locking of the spring-back shift (hereinafter "item 5.3").

Regarding item 5.1, it is submitted that the amendments made to paragraph 102 address the Examiner's concerns and it is requested that the objection be withdrawn.

As for item 5.2, Applicant has amended paragraph 104 and it is requested that the objection be withdrawn in view of these amendments, which Applicant submits address the Examiner's concerns regarding the movements (1) through (3).

Finally, it is submitted that the amendments made to paragraph 101 fully address the Examiner's concerns regarding the temporary spring-back shift. It is requested that the objection based on item 5.3 be withdrawn as well.

B. The specification is objected to under 37 C.F.R. 1.75(d)

The specification is objected to for allegedly lacking description regarding the locking means and actions of the chock on the receptacle as recited in claims 53-55.

Applicant has cancelled claims 53-55 without prejudice. Therefore, it is requested that the objection be withdrawn as moot.

CLAIM REJECTIONS

A. Claims 28-30, 33-38, 43, 51-55, 63 and 67 are rejected under 35 U.S.C. § 102(b) as being anticipated by Shimamura et al. (of record, "*Shimamura*").

The present invention as now set forth in claims 28-30, 33-38, 43, 51-55, 63 and 67 has been more particularly set forth to recite that the receptacle disengages the shock absorbers through the movement of the hood.

On the other hand, *Shinamura* does not disclose or suggest that the receptacle disengages the shock absorbers through the movement of the hood. Indeed, the shock absorbers of *Shinamura* are constantly engaged. Therefore, in view of such patentable

distinction as now set forth claims 28-30, 33-38, 43, 51-55, 63 and 67, it is requested that the anticipation rejection in view of ***Shinamura*** be withdrawn.

Moreover, Applicant respectfully disagrees with the assertion in the outstanding Action regarding the term “hermetic” as defined Webster’s 10th Edition Dictionary and the contact between the cartridge and the contacts from the block member (31).

Regarding the phrase “hermetically sealed,” it is respectfully submitted that the definition contained in the specification (see page 2, lines 6-8) takes precedence over the definition in Webster’s dictionary. MPEP section 2173.01 states that “[a] fundamental principle contained within 35 U.S.C. 112, second paragraph is that applicants are their own lexicographers” and that “[t]hey can define in the claims what they regard as their invention so long as the terms are not used in ways that are contrary to accepted meanings in the art.” It is submitted that the definition used in the specification is not contrary to the definition of “hermetic.” The Webster’s II New College Dictionary defines hermetic as “totally sealed, esp. against the escape or entry of air.” Thus, it is submitted that the definition as recited in the specification is appropriate.

B. Claim 31 is rejected under 35 U.S.C. 103(a) as being obvious in view of *Shinamura* and Hobbs (USPN 5,979,242, “*Hobbs*”).

Hobbs does not compensate for the above-discussed deficiency of ***Shinamura***. Therefore, claim 31, which depends from claim 28, is also patentable over ***Shinamura***

and **Hobbs**, individually or in combination, for at least the reasons stated above with respect to claim 28, as amended.

Further, it is respectfully submitted that there is no motivation to combine **Hobbs** with **Shinamura**. **Shinamura** is directed towards a device for reading and writing of IC external storage cards. **Hobbs**, on the other hand, is directed towards a multi-vibration test system. There is simply no suggestions to combine such references to produce the claimed invention. Absent such a teaching, a combination of the references based on hindsight gleaned from the claimed invention improper. Therefore, the rejection is improper for this reason as well and it is requested that it be withdrawn.

C. Claims 32, 39 and 40 are rejected under 35 U.S.C. 103(a) as obvious in view of *Shinamura*.

Claims 32 and 39-40 depend from claim 28. Therefore, claims 32 and 39-40 are also patentable over **Shinamura** for at least the reasons stated above with respect to claim 28, as amended.

D. Claims 60-62 have been rejected under 35 U.S.C. 103(a) as obvious in view of *Shinamura* and Hsu (USPN 5,486,982, "*Hsu*").

Claim 60 from which claims 61 and 62 depends has also been amended to further recite that the shock absorber is disengaged by the movement of the hood. Since **Hsu** does not compensate for the above-discussed deficiency with respect to the

failure of ***Shinamura*** to disclose or teach such a limitation, it is respectfully requested that the rejection be withdrawn.

E. Claims 41, 42, 65 and 66 are rejected under 35 U.S.C. 103(a) as obvious in view of *Shinamura* and Alcoe et al. (of record, "*Alcoe*").

Since claims 41, 42, 65 and 66 directly or indirectly depend on claims 28 and 63, respectively, they are also patentable over ***Shinamura*** and ***Alcoe***, both of which have the same deficiency discussed above. It is also submitted that claim 63 has been amended to recite the limitation regarding the disengagement of the shock absorber relative to the movement of the hood.

F. Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as obvious in view of *Shinamura* and Rathburn (of record, "*Rathburn*").

Because claims 44 and 45 directly or indirectly depend from claim 28, it is respectfully submitted that they are also allowable for at least the reasons presented above with respect to claim 28, as amended, in view of ***Shinamura***, the deficiency of which is not supplemented by ***Rathburn***.

G. Claims 46-50 and 68-70 have been rejected under 35 U.S.C. 103(a) as being obvious in view of *Shinamura* and St. Germain (of record, "*St. Germain*").

Since claims 46-50 and 68-70 directly or indirectly depend from claims 28 and 63, respectively, it is respectfully submitted that these claims are allowable for at least

the reasons set forth above with respect to claims 28 and 63, as amended. Additionally, it is noted that there is no motivation to combine **Shinamura** and **St. Germain**. As stated earlier, **Shinamura** is directed towards a device for reading and writing storage cards. **St. Germain**, on the other hand, is directed to an apparatus for the prevention of misengagement of multipoint connector units. It is respectfully submitted that there is no suggestion in either **Shinamura** or **St. Germain** that these references could be combined to produce the claimed invention. Therefore, it is requested that the rejection be withdrawn for these reasons as well.

H. Claim 64 is rejected under 35 U.S.C. 103(a) as obvious in view of **Shinamura** and Hashizume (of record, "**Hashizume**").

As claim 64 depends from claim 63, it is submitted that claim 64 is allowable for at least the reasons set forth above regarding claim 63 in view of **Shinamura**. Additionally, it is submitted that **Hashizume** does not supplement the above-discussed deficiency in **Shinamura**, and therefore claim 64 is patentable over **Shinamura** and **Hashizume**, individually or in combination. Additionally, it is noted that there is no motivation to combine **Shinamura** and **Hashizume** to produce the claimed invention. For instance, **Hashizume** is directed towards a method of producing an optical module. Such subject matter is completely unrelated to the present invention and one of ordinary skill in the art would not have been motivated to use **Hashizume** in an effort to create the claimed invention. Therefore, it is requested that the rejection be withdrawn for these reasons as well.

I. Claim 56 is rejected under 35 U.S.C. 103(a) as obvious in view of *Shinamura*.

Since claim 56 depends from claim 28, it is submitted that claim 56 is also allowable for the reasons set forth above with respect to claim 28, as amended. As such, it is requested that this rejection be withdrawn.

J. Claims 57-58 have been rejected under 35 U.S.C. 103(a) as obvious in view of *Shinamura* and Applicant's specification

Since claims 57 and 58 depend from claim 28, it is respectfully submitted that claims 57 and 58 are also patentable over *Shinamura* for at least the reasons set forth above with respect to claim 28, as amended. Additionally, the Applicant's specification does not compensate for the above-discussed deficiency in *Shinamura*, and therefore it is requested that this rejection be withdrawn.

* * * * *

In view of the foregoing, reconsideration of the application, withdrawal of the outstanding objections and rejections, allowance of claims 28-58 and 60-70, and the prompt issuance of a Notice of Allowability are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account No. 01-2300, referring to client-matter number 024118-00026.

Respectfully submitted,



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Enclosures: Marked Up Copy of the Claims
Marked Up Copy of the Specification
Request for Approval of Corrected Drawing
Proposed Amended Figure 5
Petition for Extension of Time (3 months)
Change of Address

MARKED UP COPY OF THE CLAIMS

28. (Twice Amended) A data storage or recording device suitable for use in a severe environment, comprising a cartridge having a stud hermetically mounted on the cartridge and

a receptacle having a plug, wherein,

the cartridge is engageable in the receptacle,

the receptacle is suspended by a shock absorber mounted in a box with a hood,
and

when engaged, the cartridge and the receptacle are electrically connected by the cooperation of the plug and the stud, said plug and said stud being connected by point contact and without lateral contact, wherein opening the hood disengages the shock absorber.

52. (Amended) The device of claim 51, [further comprising a box with a hood (70),] wherein said receptacle being suspended in said box engages said absorber according to a movement of said hood.

60. (Amended) A data storage or recording device for a severe environment comprising a cartridge (40) and a suspended receptacle (30), wherein the cartridge and receptacle are electrically connected by the cooperation of a plug (10) mounted elastically on the receptacle (30) and a stud (12, 16, or 18) hermetically mounted on the

cartridge (40) said plug (10) and said stud (12, 16, or 18) connected by contact and not by insertion, wherein the connection between cartridge (40) and receptacle (30) is made by a plurality of pairs of plugs (10) and studs (12, 16, or 18);

said plugs (10) extending through the wall of the of the receptacle (30) and presenting a protuberant portion having a rounded shape;

said plugs being mounted on a shock absorption and return means (11);

said studs (12, 16, or 18) protruding through the walls of the cartridge (40) and presenting a slightly protuberant part;

said cartridge (40) and said receptacle (30) further comprising engagement means capable of positioning said plugs (10) and said studs (12, 16, 18) opposite each other so as to make an effective electrical contact and to ensure the mechanical hold of the cartridge (40) in the receptacle (30); [and]

said plugs (10) and said studs (12, 16, or 18) generically adapted to cooperate and create an effective electrical contact when the receptacle (30) and cartridge (40) are engaged with one another; and

wherein opening a hood (70) disengages a shock absorber (300).

63. (Amended) A process for hermetically connecting a data recording and storage cartridge (40) and a receptacle (30) for use in a severe environment, comprising contacting, without inserting, a plug (10) mounted elastically on the receptacle (30) with a stud (12, 16, or 18) hermetically sealed on the cartridge (40) to form an electrical

connection between said stud and said plug, wherein said receptacle (30) disengages a shock absorber (300) when a hood (70) is opened.

MARKED UP COPY OF SPECIFICATION

Please replace paragraph [100] with the following paragraph:

[100] We know that the device made up of the receptacle 30 and the cartridge 40, as well as by various other known elements, are generally contained in a resistant and tight box. Figure 5 shows the positioning of a receptacle 30 in a box 200. One gets at the [cartridge, housed in its] receptacle[,] by opening a hood 70.

Please replace paragraph [101] with the following paragraph:

[101] The invention proposes the device include a mechanical means consisting of, e.g. a cam (75) and a retractable chock (90), for the temporary automatic locking of the [spring-back shift (M2) of] receptacle 30 to protect the shock absorbers 300 during the extraction phase and the phase in which [the] a cartridge is put back in the receptacle.

Please replace paragraph [102] with the following paragraph:

[102] With reference to Figure 5, a preferred solution for use in the invention is a device that includes a mechanical means for the temporary and automatic locking of [the shift (M2) of] receptacle 30 when one opens a hood 70 of the box 200 to gain access to the cartridge, and the same means again permits the normal spring-back shift (M2) of receptacle 30 during the closing of the hood to, that is to say, after one has put a cartridge back in place by means of engagement on the receptacle.

Please replace paragraph [104] with the following paragraph:

[104] Figure 5 shows a particular nonrestrictive means for temporary locking, characterized in that it includes a prismatic piece or a cam 75 having an inclined face

that is integral with the hood 70 and a retractable chock 90 that is integral with a piece 85 constituting the mechanical safety unit considered. The piece is integral with a control rod 80 or a similar piece capable of cooperating with the cam 75 via contact by sliding on the inclined surface of the cam or prism. The entire piece forming the chock is mounted in a rotating manner around the longitudinal axis 87 of unit 85. The unit 85 includes a return means such as a spring or a similar device, tending to lower the chock 90 behind the contact face of receptacle 30 and the various geometries, shapes and positioning of the various pieces are adapted so that the opening of the hood 70 (and thus of cam 75) according to movement (1) by [sliding] rotating relative to a y axis would release control rod 80, which then moves due to the action of the return means, not shown, according to a rotating movement (2) along an x axis to which corresponds a rotating movement (3) of chock 90 relative to a z axis, a movement that positions the chock 90 behind the receptacle 30. The thickness and positioning of chock 90 are adapted so that in this position the shock absorption (or spring release shift) movement (M1) in a linear direction along the y axis of the receptacle will be impossible.